S
634.9805
F4mf
v.9, #1
Jan. 1984
STATE DOCUMENTS COLLECTION
MAY 20 19[illegible]
MONTANA STATE LIBRARY
1515 E. 6th AVE.
HELENA, MONTANA 59620

PLEASE RETURN

MONTANA Forest Products Marketing Bulletin

Paul Moore - Editor
Department of State Lands, Division of Forestry
2705 Spurgin Road Missoula, Montana 59801
Ph:(406)728-4300

VOL. 9, NO. 1 JANUARY - 1984

This bulletin is mailed primarily to individuals engaged in the Forest Products Industry in Montana. In addition, it is mailed to county agents, lumber brokers, wholesalers, dealers of sawmill and logging equipment, interested technicians, educators and Montana Tree Farmers, as well as the Departments of Forestry in all states.

The purpose of this newsletter is to communicate information regarding the properties and uses of wood products, promote efficiency in the utilization of wood from the stump to the end product, and to serve as a communication link between the members of the forest products industry.

All persons receiving this newsetter are asked to examine théir mailing address and advise this office of any corrections needed for proper mailing.

COMPUTER PROGRAM SAWS FOR MAXIMUM VALUE

A computer program developed by the Forest Products Laboratory in Madison, Wisconsin, maximizes lumber recovery and product value by sawing with the Best Opening Face Sawing System. By inputting lumber sizes, machine limitations, lumber values, and log measurements, the computer can determine the best way to process various size logs.

The computer program was developed as part of the Sawmill Improvement Program, and is administered by the U.S. Forest Service State and Private Forestry and each state's Forest Products Utilization Specialist.

Montana State Library
3 0864 1006 7996 1

MIX YOUR OWN NATURAL WOOD FINISH

Many homeowners want an exterior finish that retains a part of the natural color and the grain of new wood or one that enhances the rustic appearance of logs, lumber or plywood. The commercially available natural finishes that form a clear film, such as varnish, have been so short-lived, however, that they are not recommended for exterior use.

One durable natural finish is the penetrating stain, developed at the Forest Products Laboratory. The FPL natural finish was formulated to overcome the more serious shortcomings inherent in such finishes of the film-forming type that are so susceptible to failure by cracking and peeling. Because the stain penetrates the wood surface and does not form a coating, there is no failure by blistering and peeling even in excessive moisture conditions. There is no coating to scrape before refinishing. Thus, the penetrating stain is easily maintained at a low cost on a variety of wood surfaces.

Advantages

Among the advantages of this finish are good color retention, good durability on a variety of smooth and rough wood surfaces, and low cost of initial application and maintenance. Evidence indicates that the first application of this finish should last approximately three years on smooth surfaces and up to eight to ten years on rough surfaces and refinished surfaces which were initially smooth. The finish simply wears away or erodes; this produces a surface that can easily be refinished.

Potential Uses

The finish was originally formulated in shades of red and brown to match reasonably well the heartwood colors of species such as redwood, western redcedar, and Philippine mahogany. FPL natural finish is now recommended in all colors, except white, on all grades of commonly used species. The rougher the surface, the better it finishes, particularly on the high-density wood species.

On smoothly planed wood surfaces, a single application at the rate of 400 to 500 square feet per gallon is recommended.

The following formulation is for mixtures of slightly less than five gallons of FPL natural finish in cedar, light redwood and dark redwood colors.

Ingredients for slightly less than 5 gallons of finish	Quantity of ingredient for: Cedar color	Light redwood color	Dark redwood color
Boiled linseed oil.....gal.	3.0	3.0	3.0
Mineral spirits or paint thinner..gal.	1.0	1.0	1.125
Penta concentrate, 10:1.....gal.	.5	.5	.5
Paraffin wax.....lb.	1.0	1.0	1.0
Zinc stearate.....lb.	.125	.125	.125
Burnt sienna tinting colors.....pint	1.0	2.0	.333
Raw umber tinting colors.....pint	1.0	None	.333
Indian red iron oxide colors.....pint	None	None	.667

By varying the ratio of tinting colors, various hues of the color desired can be obtained. The color pigments are available in most paint stores as tinting colors and in artist supply stores as colors-in-oil. The colors of high-quality iron oxide pigments are very durable and other colors may prove only slightly less so. Durability, however, depends largely on the amount of pigment or stain applied to the surface. Doubling the amount of pigment in the formula will therefore improve the durability, but will make the finish less transparent and the color more intense. The finish used without pigments produces a beautiful natural oil appearance but will need refinishing about every two years.

The boiled linseed oil, mineral spirits, or other paint thinner can be purchased at paint stores; the penta concentrate, at paint stores, lumber yards, farm supply stores, or mail-order houses; the paraffin wax, at grocery stores; and the zinc stearate, at drug stores. Zinc stearate, which prevents caking of the pigments during storage and helps to keep the pigments suspended during use, can be omitted if the stain is used soon after mixing, and is frequently stirred.

For more information on these formulas, contact the Forest Products Laboratory in Madison, Wisconsin, or your state's Forest Products Specialist.

SURVEY CONFIRMS SHARP INCREASE IN HOME WOOD BURNING

A recent U.S. Forest Service survey reported that stoves, fireplaces, and furnaces in American homes now burn more wood than at any time since World War II.

In 1981, residential wood burning required 42 million standard cords, which is four to five times that amount that was burned ten years ago. It is about one-fourth of the amount of wood used for all other wood products in the United States, and is enough wood to build a wall 8 feet wide by 44 feet high, stretching from Washington, DC, to San Francisco.

If fuel wood sales were a single business, it would be among the largest 500 companies in the United States, with a nationwide sales value of 620 million dollars.

The complete survey is available from: U.S. Department of Comerce, WTIS 5285 Port Royal Road, Springfield, VA 22151. Publication No. ADA 1, 724, $16.00 for hard copy and $4.50 for microfiche.

GEORGE BALDRIDGE NAMED WWPA LUMBER INSPECTOR IN WASHINTON, IDAHO, MONTANA

Portland, Ore.--George Baldridge has been named a lumber inspector for the Western Wood Products Association, according to WWPA Chief Lumber Inspector Bill Spannaus.

Baldridge will be responsible for making periodic mill grade inspections and coaching mill grading personnel at lumber mills in the Inland Empire area. He will be stationed in Coeur d'Alene, Idaho. Prior to joining WWPA, Baldridge was employed as a lumber grader by Norby Lumber Co., Inc., Madera, Ca.

NEW PUBLICATIONS

The following publications are available free of charge by writing the Publications Dept., Forest Products Laboratory, North Walnut St., P.O. Box 5130, Madison, WI 53705.

Compare: A Method for Analyzing Investment Alternatives in Industrial Wood and Bark Energy Systems COMPARE is a FORTRAN computer program resulting from a study to develop methods for comparative economic analysis of alternatives in industrial wood and bark enegy systems. COMPARE provides complete guidelines for economic analysis of wood and bark energy systems. As such, COMPARE can be useful to those who have only basic familiarity with investment analysis of wood and bark energy systems. This report provides instructions on how to prepare data for COMPARE, information on how to use the program, sample data, sample output, and a listing of the program. COMPARE ranks investment alternatives according to the highest benefit cost ratio based on discounted energy values and cash flows. The use of a benefit cost ratio as a ranking criterion is analyzed and explained in an appendix to this report. To obtain a copy of this program, request General Technical Report FPL-36.

DEP: A Computer Program for Evaluating Lumber Drying Costs and Investments The DEP computer program is a modified discounted cash flow computer program designed for analysis of problems involving economic analysis of wood drying processes. Wood drying processes are different from other processes beause of the large amounts of working capital required to finance inventories, and because of relatively large shares of costs charged to inventory insurance and tax. DEP's flexibility allows calculation of rate return, break-even transfer prices, or break-even facilities costs. Data input requirements are simplified into basic analytical omponents that are explained and illustrated with example analyses. To obtain a copy of this program, request General Technical Report FPL-37.

An Evaluation of Saw-Dry-Rip (SDR) for the Manufacture of Studs from Small Ponderosa Pine Logs Data show that the saw-dry-rip (SDR) method produces higher yields of STUD gade material than is produced by conventional sawing and drying o than has been produced in other studies using young-growth ponderosa pine. The studs are also more stable. Small logs were live sawn into flitches. The flitches were kiln-dried and then ripped into studs for planing. The SDR treatment with high temperature drying resulted in 77.8 per cent of studs so produced meeting the STUD grade after 30 or more days of storage. Juvenile wood, compression wood, and less than optimum drying are discussed relative to problems yet remaining in the manufacture of studs from small ponderosa pinelogs. To obtain a copy of this program, request General Technical Report FPL-435.

STOLTZE-CONNER SAWMILL IN DARBY RE-BUILT

Six months after a fire, sparked by a welder, destroyed the Stoltze-Conner Lumber Company, the mill is once again sawing lumber. Rem Khort, manager, attributes the success to the exceptional talents of the mill employees. Khort said that additional equipment will be installed within the next year to bring production to desired levels.

MEETINGS

January 23-26, 1984--Seventh Annual Seminar on "Fundamentals of the Forest Products Industry", Seattle Marriott Hotel, Seattle, Washington. The program is designed for non-forest products executives. For more information contact J. Leraas, Leonard Guss Associates, Inc., P.O. Box 11329, Tacoma, WA 98411.

January 30-February 1, 1984, "Sawing Technology, the Key to Improved Profits", San Antonio Marriott Hotel, San Antonio, Texas. The conference will provide a detailed update of the technologies available to improve saw performance. For more information contact the Forest Products Research Society, 2801 Marshall Ct., Madison, WI 53705. Phone (608)231-1361.

The following short courses will be offered by Oregon State University's School of Forestry Extension Program: "Plywood Manufacturing", March 12-16; and "International Marketing of Forest Products", January/February. For more information on these programs contact the Conference Assistant, Corvallis, Oregon, phone (503)754-2004.

March 28-31, 1984--46th Intermountain Logging Conference, Ridpath Hotel & Motor Inn, Spokane, Washington. The theme for the conference is "Return to Reality". For more information contact Intermountain Logging Conference, Inc., P.O. Box 1177, Coeur d'Alene, ID 83814, or phone (208)667-8121.

The 28th Annual Rocky Mountain Forest Industries Conference and Equipment Show will be held April 4, 5, and 6, 1984, at the Salt Lake Hilton Hotel in Salt Lake City, Utah. The theme for the conference is "A Time For Innovation, Efficiency and Cooperation". Sessions to be addressed are "Quality Control and Improved Utilization", "Marketing and Exports", "Harvesting and Managing Timber on Steep Slopes in the Rocky Mountains", and "Product Development and Utilization". The meeting will be co-sponsored by the Forest Products Research Society's Rocky Mountain Section. For more information, contact Program Chairman David C. Schen, 3100 State Office Building, Salt Lake City, UT 84114. Phone (801)533-5381.

April 17-19, 1984--Micro-computers in Forestry, University of Montana. This program is designed for foresters, loggers and wood products processors. For more information, contact Continuing Education at 243-2900.

April 30-May 2, 1984--39th Annual Northwest Wood Products Clinic, Red Lion Motor Inn, Spokane, WA. The meeting is designed for sawmill and other wood products manufacturers and features a state of the art equipment show. Session topics are, "Productivity Considerations", "Sawmilling: Cutting and Drying", "New Technology for Structural Panels", and "Improvements for Today's Log Yards". The meeting is jointly co-sponsored by the Inland Empire Forest Products Industries and the Forest Products Research Society. For more information contact Don Powell, St. Regis Paper Company, Libby (406)293-4141.

GLUING MONTANA'S COMMERCIAL WOODS

More and more gluing is done with wood in producing laminated wood and other built-up wood products, plywood, and sandwich materials furniture, etc. Modern adhesives, processes, and techniques vary as widely as the glued-wood products made with them, and many developments have been made in recent years. In general, however, the quality and serviceability of a glued-wood joint depends upon (1) kind of wood and its preparation for use, (2) kind and quality of the adhesive, (3) control exercised over the gluing process, (4) types of joints or construction, and (5) moisture-excluding effectiveness of the finish or protective treatment applied to the glued product. Besides these factors, conditions in use affect the performance of the joint.

Cottonwood, Grand Fir, Western Larch, Western Redcedar, and Spruce glue very easily with glues of a wide range of properties and under a wide range of gluing conditions. Douglas-fir, Hemlock, and Ponderosa Pine glue well with glues of a fairly wide range of properties under a moderately wide range of gluing conditions.

The Wood Handbook, Wood as an Engineering Material, published by the Forest Products Laboratory in Madison, WI 53705, discusses characteristics, preparation, and use of the adhesives most commonly used for bonding different species. This book is suggested reading for all those planning to glue wood.

FOR SALE: SERVICES & EQUIPMENT

Model 20 Pettibone Log Handler with Log Forks. Located at Livingston, MT. Call 503-686-1223 or write: P.O. Box 668, Eugene, OR 97440.

Model R Diesel Tractor, extremely fuel efficient. Good for small circle sawmill, $1,000.00. Phone (406) 273-0502,

Morbark Post Peeler--Rebuilt in 1978. New infeed and outfeed shoes, extra set of knives, 2 doweler heads, drill, new 3 hp motor. Runs on 65 hp Chrysler industrial (included), regular gasoline. Excellent condition. $12,500.00 cash or cashier's check. For more information, call 826-3222 after 5 p.m. Can be seen 1 mile west of Plains, MT on Highway 200.

Black Clawson Veneer Chippers are designed to produce the maximum yield of unprecdented high quality chips for the pulp mill and particle board industries. The positive controlled feeding arrangements including patented hold down fingers is a major factor in producing high quality, low fines content chips. These chippers are also available in super long chip (up to 3") models to provide furnish for the "oriented strand board" industry.

Ask about our new MaxiChip Conversion Kit for most existing 78" Veneer Chippers.
Contact Mary Benedetto, Black Clawson, Inc., P.O. Box 1028, Everett, WA 98206. Phone (206) 258-3555.

WANTED: SERVICES AND EQUIPMENT

Old Tie Mill for display at Fort Missoula Historical Museum. Contact Roger Bergmeier at Montana Division of Forestry, Missoula, MT, 728-4300. The older, the better.

FOR SALE: FOREST PRODUCTS

We can supply truckloads or carloads of prefabricated and/or any preservative treated forest products such as Cross Ties--New or Used, Scaffolding, Construction Mats, Poles Piling, and .40 CCA GM #2 Southern Yellow Pine Decking and Framing LP-22 Outdoor Lumber, etc. Contact us for your difficult or unusual specifications. Call or write Germain Timber Co., 304 Center Avenue, Pittsburgh, PA 15215, phone 412/782-3240.

Domestic hardwoods and exports for contract periods of ninety days or longer. Shipments made on time and on grade for better inventory control. Contact: Fowler Lumber Company, P.O. Box 1266, Hendersonville, TN 37075, (615)-822-5100.

POSTS, lodgepole pine, KILN-dried, full length PENTA treated, 7 and 8' lengths. Dowelled rails up to 16'. Truck load lots only. Prices quoted on request. (208) 267-2211. Bonners Ferry Post Company, Box 855, Bonners Ferry, ID 83805.

Micro thin wooden business cards, same dimensions as standard business cards but made of double thin veneers. Ideal for anyone in the lumber or woodworking industries or associated in any way with wood, including machinery dealers, etc. Very reasonably priced at $77.50 per 500 and $108.00 per 1,000. Additional charges for specialty printing (logos, colored ink, etc.). Specify item #CF-235.
Yardsticks . . . high quality select wood with natural finish approximately 5/32" x 1 1/8" x 36" printed with inch scale, firm name, address, phone and slogan on both sides, in black. Very reasonably priced at $307.00 per 1,000, $170.00 per 500 and $107.00 per 250. Specify item #CF-88.

WANTED: FOREST PRODUCTS

Germain Timber Company is looking for suppliers of Construction Grade Shoring Lumber. If you are dependable and looking for an outlet for your low grade lumber, call our Buyer, Mr. Paul Baer, at 412/782-3240.

Wildwood Log Homes is looking for sawmills who can supply 6" x 12" Hemlock or Douglas Fir in long lengths (up to40 feet) in rail car lots. We are looking for green, rough sawn, standard or better material. Wildwood Log Homes, P.O. Box 1365, Pigeon Forge, TN 37862.

If you wish to advertise a forest product or a piece of wood-processing machinery in this bulletin complete the form below. No charge is made for this service. If you wish to rerun an item, a written request must be submitted before the next issue.

NAME OF PERSON OR FIRM: _____

MAILING ADDRESS: _____

ZIP CODE: _____ PHONE: _____

Type or print your advertisement in the space below, detach and return to:

Department of State Lands
Division of Forestry
Forest Products Bulletin
2705 Spurgin Road
Missoula, MT 59801

DEPARTMENT OF STATE LANDS
DIVISION OF FORESTRY
2705 Spurgin Road
Missoula, MT 59801

BULK RATE
U.S. POSTAGE
PAID
PERMIT NO. 345
MISSOULA, MT 59801